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DEVOTED TO FUNDAMENTAL RESEARCH IN THE
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SCOPE AND PURPOSE

BRAIN RESEARCH provides a medium for prompt publication of articles in the fields of neuroanatomy, neurochemistry, neurophysiology, neuroendocrinology, neuropharmacology, neurocommunications, behavioural sciences, molecular neurology and biocybernetics. Clinical studies that are of fundamental importance and have a direct bearing on the knowledge of the structure and function of the brain, the spinal cord, and the peripheral nerves will also be published.

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1. **Full-length papers** reporting results of original fundamental research in any branch in the brain sciences. It is expected that these papers will be published about six months after acceptance.
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3. **Review articles.** A supplementary volume entitled *Brain Research Reviews* will be published bimonthly which will be devoted to Review articles and occasionally long research papers with extensive review components, giving a survey, an evaluating and critical interpretation of recent research data and conceptions in a particular field of brain research or on a specific problem or topic of interest to workers in the brain sciences.

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INTRODUCTION

The 1982 Cumulative Author and Subject Index is comprised of six separate indexes. These are: the Author Index followed by its corresponding Subject Index for *Brain Research*, *Developmental Brain Research* and *Brain Research Reviews*, in that order. For the sake of clarity it must be pointed out that both *Developmental Brain Research* and *Brain Research Reviews* have a double classification system such that Vols. 2–4 of *Developmental Brain Research* are in fact Vols. 254–256 of *Brain Research*, and Vol. 4 of *Brain Research Reviews* is Vol. 257 of *Brain Research*. In this index, however, these are treated as three separate journals and indexes resulting in Vols. 254–257 not being cited at all.

The form of the Author Index(es) is the same as that which was used in previous annual cumulative indexes. The form of the Subject Index(es) is that which was initially used in the 1980 Cumulative Index utilizing the key words relating to each article. Each key word appears as a main entry (bold) followed by the rest of the key words relating to that article, then only the first author is cited in parenthesis, and this is followed by the volume number (in bold) and the first page number. The full published title and co-authors of that article are retrievable by consulting the relevant entry for the first author in the Author Index.

Readers should note that American spelling is used throughout the Subject Indexes.

The Editor and Publishers welcome any comments on the usefulness of this index, as well as suggestions for improvements.

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Hippocampus; Acetylcholine; Septum; Dentate gyrus; Muscarinic receptors; Carbachol; Theta (Flicker, C.) **4**, 105

B

Basal forebrain

Acetylcholine; Acetylcholinesterase; Cholinergic anatomy; Muscarinic receptors; Nicotinic receptors (Fibiger, H.C.) **4**, 327

Behavior

Color vision; Retina; Neural processing; Fish vision (Wheeler, T.G.) **4**, 177

Blood-brain barrier

Blood-brain hexose transfer; Brain uptake of hexoses; Glucose phosphorylation in brain; "Lumped constant"; 2-Deoxyglucose method (Gjedde, A.) **4**, 237

Blood-brain hexose transfer

Blood-brain barrier; Brain uptake of hexoses; Glucose phosphorylation in brain; "Lumped constant"; 2-Deoxyglucose method (Gjedde, A.) **4**, 237

Brain development

Undernutrition; Starvation; Myelination; Oligodendroglia; Vulnerable periods (Wiggins, R.C.) **4**, 151

Brain uptake of hexoses

Blood-brain barrier; Blood-brain hexose transfer; Glucose phosphorylation in brain; "Lumped constant"; 2-Deoxyglucose method (Gjedde, A.) **4**, 237

C

CG 3509

TRH; CNS stimulation; DN 1417; CG 3703; RX 77368; MK-771; TSH; Prolactin (Metcalfe, G.) **4**, 389

CG 3703

TRH; CNS stimulation; DN 1417; CG 3509; RX 77368; MK-771; TSH; Prolactin (Metcalfe, G.) **4**, 389

CNS stimulation

TRH; DN 1417; CG 3509; CG 3703; RX 77368; MK-771; TSH; Prolactin (Metcalfe, G.) **4**, 389

Carbachol

Hippocampus; Acetylcholine; Septum; Dentate gyrus; Muscarinic receptors; Atropine; Theta (Flicker, C.) **4**, 105

Hippocampus; Neurotransmitter interactions; Norepinephrine; Acetylcholine; GABA; Picrotoxin; Neuromodulation (Flicker, C.) **4**, 137

Catecholamines

Adrenergic neurons; Dopamine- β -hydroxylase; Fluorescence microscopy; Hypothalamus; Immunohistochemistry; Neuroendocrinology; Noradrenergic neurons; Paraventricular nucleus; Supraoptic nucleus (Sawchenko, P.E.) **4**, 275

Cholinergic anatomy

Acetylcholine; Acetylcholinesterase; Basal forebrain; Muscarinic receptors; Nicotinic receptors (Fibiger, H.C.) **4**, 327

Color vision

Retina; Behavior; Neural processing; Fish vision (Wheeler, T.G.) **4**, 177

D

DN 1417

TRH; CNS stimulation; CG 3509; CG 3703; RX 77368; MK-771; TSH; Prolactin (Metcalf, G.) 4, 389

Dentate gyrus

Hippocampus; Norepinephrine; Locus coeruleus; Exploration; Propranolol; Tyramine (Flicker, C.) 4, 79

Hippocampus; Acetylcholine; Septum; Muscarinic receptors; Carbachol; Atropine; Theta (Flicker, C.) 4, 105

Hippocampus; Lidocaine; Picrotoxin; Hippocampal lesions; Acute lesions; GABA; Local anesthetics (Flicker, C.) 4, 129

2-Deoxyglucose method

Blood-brain barrier; Blood-brain hexose transfer; Brain uptake of hexoses; Glucose phosphorylation in brain; "Lumped constant" (Gjedde, A.) 4, 237

Dopamine- β -hydroxylase

Adrenergic neurons; Catecholamines; Fluorescence microscopy; Hypothalamus; Immunohistochemistry; Neuroendocrinology; Noradrenergic neurons; Paraventricular nucleus; Supraoptic nucleus (Sawchenko, P.E.) 4, 275

Dorsal horn neurons

Skin mechanical stimulation; Rabbit (Aitken, S.C.) 4, 65

E

Epicritic

Innervation; Skin; Pain; Protopathic; Regeneration (Munger, B.L.) 4, 1

Exploration

Hippocampus; Norepinephrine; Dentate gyrus; Locus coeruleus; Propranolol; Tyramine (Flicker, C.) 4, 79

F

Fish vision

Color vision; Retina; Behavior; Neural processing (Wheeler, T.G.) 4, 177

Fluorescence microscopy

Adrenergic neurons; Catecholamines; Dopamine- β -hydroxylase; Hypothalamus; Immunohistochemistry; Neuroendocrinology; Noradrenergic neurons; Paraventricular nucleus; Supraoptic nucleus (Sawchenko, P.E.) 4, 275

G

GABA

Hippocampus; Lidocaine; Picrotoxin; Hippocampal lesions; Acute lesions; Dentate gyrus; Local anesthetics (Flicker, C.) 4, 129

Hippocampus; Neurotransmitter interactions; Norepinephrine; Acetylcholine; Carbachol; Picrotoxin; Neuromodulation (Flicker, C.) 4, 137

Glucose phosphorylation in brain

Blood-brain barrier; Blood-brain hexose transfer; Brain uptake of hexoses; "Lumped constant"; 2-Deoxyglucose method (Gjedde, A.) 4, 237

H

Hippocampal lesions

Hippocampus; Lidocaine; Picrotoxin; Acute lesions; Dentate gyrus; GABA; Local anesthetics (Flicker, C.) 4, 129

Hippocampus

Norepinephrine; Dentate gyrus; Locus coeruleus; Exploration; Propranolol; Tyramine (Flicker, C.) 4, 79

Acetylcholine; Septum; Dentate gyrus; Muscarinic receptors; Carbachol; Atropine; Theta (Flicker, C.) 4, 105

Lidocaine; Picrotoxin; Hippocampal lesions; Acute lesions; Dentate gyrus; GABA; Local anesthetics (Flicker, C.) **4**, 129

Neurotransmitter interactions; Norepinephrine; Acetylcholine; GABA; Carbachol; Picrotoxin; Neuromodulation (Flicker, C.) **4**, 137

Hypothalamus

Adrenergic neurons; Catecholamines; Dopamine- β -hydroxylase; Fluorescence microscopy; Immunohistochemistry; Neuroendocrinology; Noradrenergic neurons; Paraventricular nucleus; Supraoptic nucleus (Sawchenko, P.E.) **4**, 275

I

Immunohistochemistry

Adrenergic neurons; Catecholamines; Dopamine- β -hydroxylase; Fluorescence microscopy; Hypothalamus; Neuroendocrinology; Noradrenergic neurons; Paraventricular nucleus; Supraoptic nucleus (Sawchenko, P.E.) **4**, 275

Innervation

Skin; Pain; Epicritic; Protopathic; Regeneration (Munger, B.L.) **4**, 1

L

Lidocaine

Hippocampus; Picrotoxin; Hippocampal lesions; Acute lesions; Dentate gyrus; GABA; Local anesthetics (Flicker, C.) **4**, 129

Local anesthetics

Hippocampus; Lidocaine; Picrotoxin; Hippocampal lesions; Acute lesions; Dentate gyrus; GABA (Flicker, C.) **4**, 129

Locus coeruleus

Hippocampus; Norepinephrine; Dentate gyrus; Exploration; Propranolol; Tyramine (Flicker, C.) **4**, 79

"Lumped constant"

Blood-brain barrier; Blood-brain hexose transfer; Brain uptake of hexoses; Glucose phosphorylation in brain; 2-Deoxyglucose method (Gjedde, A.) **4**, 237

M

MK-771

TRH; CNS stimulation; DN 1417; CG 3509; CG 3703; RX 77368; TSH; Prolactin (Metcalf, G.) **4**, 389

rabbit Type I mechanoreceptors

Sural nerve (Aitken, S.C.) **4**, 45

rabbit Type II mechanoreceptors

Sural nerve (Aitken, S.C.) **4**, 57

Muscarinic receptors

Hippocampus; Acetylcholine; Septum; Dentate gyrus; Carbachol; Atropine; Theta (Flicker, C.) **4**, 105

Acetylcholine; Acetylcholinesterase; Basal forebrain; Cholinergic anatomy; Nicotinic receptors (Fibiger, H.C.) **4**, 327

Myelination

Undernutrition; Starvation; Oligodendroglia; Brain development; Vulnerable periods (Wiggins, R.C.) **4**, 151

N

Neural processing

Color vision; Retina; Behavior; Fish vision (Wheeler, T.G.) **4**, 177

Neuroendocrinology

Adrenergic neurons; Catecholamines; Dopamine- β -hydroxylase; Fluorescence microscopy; Hypothalamus; Immunohistochemistry; Noradrenergic neurons; Paraventricular nucleus; Supraoptic nucleus (Sawchenko, P.E.) **4**, 275

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Hippocampus; Neurotransmitter interactions; Norepinephrine; Acetylcholine; GABA; Carbachol; Picrotoxin (Flicker, C.) **4**, 137

Neurotransmitter interactions

Hippocampus; Norepinephrine; Acetylcholine; GABA; Carbachol; Picrotoxin; Neuromodulation (Flicker, C.) **4**, 137

Nicotinic receptors

Acetylcholine; Acetylcholinesterase; Basal forebrain; Cholinergic anatomy; Muscarinic receptors (Fibiger, H.C.) **4**, 327

Noradrenergic neurons

Adrenergic neurons; Catecholamines; Dopamine- β -hydroxylase; Fluorescence microscopy; Hypothalamus; Immunohistochemistry; Neuroendocrinology; Paraventricular nucleus; Supraoptic nucleus (Sawchenko, P.E.) **4**, 275

Norepinephrine

Hippocampus; Dentate gyrus; Locus coeruleus; Exploration; Propranolol; Tyramine (Flicker, C.) **4**, 79

Hippocampus; Neurotransmitter interactions; Acetylcholine; GABA; Carbachol; Picrotoxin; Neuromodulation (Flicker, C.) **4**, 137

O**Oligodendroglia**

Undernutrition; Starvation; Myelination; Brain development; Vulnerable periods (Wiggins, R.C.) **4**, 151

P**Pain**

Innervation; Skin; Epicritic; Protopathic; Regeneration (Munger, B.L.) **4**, 1

Paraventricular nucleus

Adrenergic neurons; Catecholamines; Dopamine- β -hydroxylase; Fluorescence microscopy; Hypothalamus; Immunohistochemistry; Neuroendocrinology; Noradrenergic neurons; Supraoptic nucleus (Sawchenko, P.E.) **4**, 275

Picrotoxin

Hippocampus; Lidocaine; Hippocampal lesions; Acute lesions; Dentate gyrus; GABA; Local anesthetics (Flicker, C.) **4**, 129

Hippocampus; Neurotransmitter interactions; Norepinephrine; Acetylcholine; GABA; Carbachol; Neuromodulation (Flicker, C.) **4**, 137

Prolactin

TRH; CNS stimulation; DN 1417; CG 3509; CG 3703; RX 77368; MK-771; TSH (Metcalf, G.) **4**, 389

Propranolol

Hippocampus; Norepinephrine; Dentate gyrus; Locus coeruleus; Exploration; Tyramine (Flicker, C.) **4**, 79

Protopathic

Innervation; Skin; Pain; Epicritic; Regeneration (Munger, B.L.) **4**, 1

R**RX 77368**

TRH; CNS stimulation; DN 1417; CG 3509; CG 3703; MK-771; TSH; Prolactin (Metcalf, G.) **4**, 389

Rabbit

Dorsal horn neurons; Skin mechanical stimulation (Aitken, S.C.) **4**, 65

Regeneration

Innervation; Skin; Pain; Epicritic; Protopathic (Munger, B.L.) **4**, 1

Retina

Color vision; Behavior; Neural processing; Fish vision (Wheeler, T.G.) **4**, 177

S**Septum**

Hippocampus; Acetylcholine; Dentate gyrus; Muscarinic receptors; Carbachol; Atropine; Theta (Flicker, C.) **4**, 105

Skin

Innervation; Pain; Epicritic; Protopathic; Regeneration (Munger, B.L.) **4**, 1

Skin mechanical stimulation

Dorsal horn neurons; Rabbit (Aitken, S.C.) **4**, 65

Starvation

Undernutrition; Myelination; Oligodendroglia;
Brain development; Vulnerable periods
(Wiggins, R.C.) **4**, 151

Supraoptic nucleus

Adrenergic neurons; Catecholamines;
Dopamine- β -hydroxylase; Fluorescence
microscopy; Hypothalamus;
Immunohistochemistry; Neuroendocrinology;
Noradrenergic neurons; Paraventricular
nucleus (Sawchenko, P.E.) **4**, 275

Sural nerve

rabbit Type I mechanoreceptors (Aitken, S.C.)
4, 45

rabbit Type II mechanoreceptors (Aitken, S.C.)
4, 57

T**TRH**

CNS stimulation; DN 1417; CG 3509; CG 3703;
RX 77368; MK-771; TSH; Prolactin
(Metcalf, G.) **4**, 389

TSH

TRH; CNS stimulation; DN 1417; CG 3509; CG
3703; RX 77368; MK-771; Prolactin
(Metcalf, G.) **4**, 389

Theta

Hippocampus; Acetylcholine; Septum; Dentate
gyrus; Muscarinic receptors; Carbachol;
Atropine (Flicker, C.) **4**, 105

Tyramine

Hippocampus; Norepinephrine; Dentate gyrus;
Locus coeruleus; Exploration; Propranolol
(Flicker, C.) **4**, 79

U**Undernutrition**

Starvation; Myelination; Oligodendroglia;
Brain development; Vulnerable periods
(Wiggins, R.C.) **4**, 151

V**Vulnerable periods**

Undernutrition; Starvation; Myelination;
Oligodendroglia; Brain development
(Wiggins, R.C.) **4**, 151

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- 3 Sofroniew, M. V., Morphology of vasopressin and oxytocin neurones and their central and vascular projections. In B. A. Cross and G. Leng (Eds.), *The Neurohypophysis: Structure, Function and Control, Progress in Brain Research*, Vol. 60, Elsevier, Amsterdam, 1983, pp. 101-114.

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